## FUNCTIONALIZED ZEOLITE COMPOSITIONS AND METHODS FOR THEIR PREPARATION AND USE

## ABSTRACT OF THE DISCLOSURE

[0078] Disclosed herein are zeolite compositions comprising structural units of the formulae:

wherein "B" and "C" are spacer groups comprising  $C_2$  to  $C_{20}$  hydrocarbyl groups; and  $R^1$  and  $R^2$  independently of each other comprise alkali metal, hydrogen, or  $C_1$  to  $C_{20}$  alkyl groups. The zeolite compositions further comprise structural units derived from a heteropolyacid compound of the formula:  $(M^3)_3(M^4)(M^5)_{12}O_{40}$ ; where  $M^3$  comprises hydrogen or an alkali metal;  $M^4$  comprises phosphorus or silicon, and  $M^5$  comprises tungsten or molybdenum. Methods for preparing these zeolite compositions are also disclosed. The zeolite compositions are useful as catalysts for producing bisphenols.